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REMARKS

In the Office Action dated December 1, 2005, claims 1-69 are pending. The Office Action states that the claims are directed to separate and distinct inventions and for that reason an election is required and a restriction for examination purposes is proper.

The Office Action groups claims 1-69 into a Group I having claims 1-21 and 46-54, into a Group II having claims 22-45 and 55, and into a Group III having claims 56-69. The Office Action states that Group I is drawn to a process, classified in class 701, subclass 3, that Group II is drawn to an apparatus, classified in class 701, subclass 4, and that Group III is drawn to an apparatus, classified in class 244, subclass 164. Applicant elects Group I without traverse.

In paragraph 6, the Office Action states that upon election of Invention I or II, that Applicant is further required to elect one of the species disclosed in the embodiments of Figures 1, 2, 4, 6, and 7. Applicant elects species E to Figure 7.

In paragraph 7, the Office Action states that upon election of one of the species A, B, C, D, or E, that Applicant is further required to elect one of the following species: a. Active force cueing system (claim 6) or b. Visual or tactile cueing system (claim 7). Applicant elects species a.

In paragraph 8, the Office Action states that upon election of one of the species a or b, the Applicant is further required to elect one of the following species: i. Limits based on transfer of potential and kinetic energy (claim 9) or j. Limits based on potential change in vertical velocity (claim 10). Applicant elects species i.

In paragraph 9, the Office Action states that upon election of one of the species i or j, the Applicant is further required to elect one of the following species: a1. Constant vertical altitude (claim 12), b1. Constant vertical velocity (claim 13), and c1. Constant flight path angle (claim 14). Applicant elects species a1.

In paragraph 10, the Office Action states that upon election of one of the species a1, b1, or c1, the Applicant is further required to elect one of the following species: a2. Vertical inceptor position predicted based on vehicle performance

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(claim 16) or b2. Vertical inceptor position predicted based on feedback loop of error (claim 17). Applicant elects species a2.

In paragraph 11, the Office Action states that upon election of one of the species a2 or b2, the Applicant is further required to elect on of the following species: a3. Minimum and maximum vertical inceptor position limits based on predictions of vehicle performance (claim 18), b3. Minimum and maximum vertical inceptor position limits based on feedback (claim 19), and c3. Minimum and maximum vertical inceptor position limits based on transmission torque, engine torque, or etc (claim 20). Applicant elects species a3.

In paragraph 12, the Office Action states that upon election of one of the species a3, b3, or c3, the Applicant is further required to elect on of the following species: a4. Controller generates control signal (claim 28) or b4. Controller generates vehicle flight profile (claim 29). Applicant elects species a4.

In paragraph 13, the Office Action states that upon election of one of the species a4 or b4, the Applicant is further required to elect on of the following species: a5. Controller in determining pitch attitude limit sets (claim 31) or b5. Controller in determining roll attitude limit sets (claim 32). Applicant elects species a5.

In paragraph 14, the Office Action states that upon election of one of the species a5 or b5, the Applicant is further required to elect on of the following species: a6. Generating cueing signal determines maximum change in pitch (claim 33), b6. Generating cueing signal determines maximum change in roll attitude (claim 35), c6. Generating cueing signal determines pitch attitude limits (claim 36), d6. Generating cueing signal determines roll attitude limits (claim 37), e6. Generating cueing signal determines pitch attitudes using conversation of energy (claim 38), f6. Generating cueing signal determines pitch attitude and roll attitudes using conversation of energy (claim 39), or g6. Generating cueing signal determines pitch attitudes and roll attitudes using thrust and gravitational force (claim 42). Applicant elects species a6.

In paragraph 15, the Office Action states that upon election of one of the species a6, b6, c6, d6, e6, f6, or g6 the Applicant is further required to elect on of

the following species: a7. Conversation of energy based on pitch attitude limits and roll attitude limits to vertical controller parameters (claim 40) or b7. Conversation of energy based on pitch attitude limits and roll attitude limits to torque (claim 41). Applicant elects species a7.

In paragraph 16, the Office Action states that upon election of one of the species a7 or b7 the Applicant is further required to elect on of the following species: a8. Using conservation of energy based relationships (claim 50) or b8. Using thrust and gravitational force based relationships (claim 51). Applicant elects species a8.

In paragraph 17, the Office Action states that upon election of one of the species a8 or b8 the Applicant is further required to elect on of the following species: a9. Acceleration and deceleration limits represented as pitch and roll attitude limits (claim 57) or b9. Acceleration or deceleration limits represented as allowable increase or decrease in pitch or roll attitude (claim 58). Applicant elects species a9.

In paragraph 18, the Office Action states that upon election of one of the species a9 or b9 the Applicant is further required to elect on of the following species: a10. Limits are cued to tactile cues (claim 60) or b10. Limits are cued to an aural (claim 61). Applicant elects species a10.

In paragraph 19, the Office Action states that upon election of one of the species a10 or b10 the Applicant is further required to elect on of the following species: a11. Calculated limits based on transfer of potential and kinetic energy (claim 63), b11. Calculated limits based on the potential change in vertical velocity (claim 64), or c11. Calculated limits based on rotor thrust (claim 63). Applicant elects species a11.

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Should the Examiner have any questions or comments, he is respectfully requested to contact the undersigned attorney.

Respectfully submitted,

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